

BULLETIN

Volume 11 Number 5

Division of Health

December 2004

Influenza Update

Reports of sporadic, isolated influenza cases began nationwide in October, 2004. Idaho was no exception. In early October two culture-positive influenza A (H3N2) cases were detected in eastern Idaho. Both isolates are currently at the Centers for Disease Control and Prevention (CDC) undergoing further testing to determine if they match the virus strain used in this year's vaccine. Nationally, the Fujian strain appears to be predominant early in the season.

On October 5, 2004, Chiron Corporation announced a significant disruption in their influenza vaccine supply, leading to a nationwide shortage of vaccine for the 2004–2005 season. With 50% of the vaccine unexpectedly lacking for the current influenza season, CDC, in coordination with its Advisory Committee for Immunization Practices (ACIP), issued interim recommendations for influenza vaccination during the 2004–05 season. Prioritization guidelines for healthcare providers for the remaining vaccine will continue throughout the 2004–05 flu season with little influx of vaccine from other sources expected any time soon. Influenza vaccine prioritization guidelines were described in the October 2004 Idaho Disease Bulletin and on the CDC website at www.cdc.gov/flu/professionals/vaccination/. State and local public health officials are closely working with CDC to direct remaining vaccine supplies to people most at risk of serious complications from influenza.

With rapid dissemination of the remaining supply of inactivated vaccine and the small amount of live-attenuated influenza vaccine (FluMist®) available, non-vaccine prevention messages are a very important aspect of disease management this flu season. Many resources on infection control in health care settings are available online. These include respiratory/cough etiquette and patient information at www.cdc.gov/flu/professionals/infectioncontrol/.

In response to the current vaccine shortage, CDC has developed interim recommendations on the use of antiviral medications for the 2004–05 influenza season. The document "Influenza Antiviral Medications: 2004–05 Interim Chemoprophylaxis and Treatment Guidelines" can be found at www.cdc.gov/flu/professionals/treatment/0405antiviralguide.htm

Officials are looking at ways to avoid future vaccine shortages, including having the federal government buy millions of doses each year to entice more companies to make the vaccine.



Rabid Skunk Found in Gooding County, Idaho

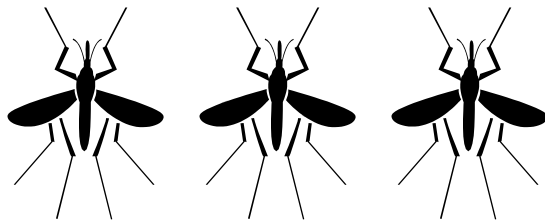
A rabid striped skunk recently attacked a teenager in Gooding County. This was an unprovoked attack; the skunk was tested and found to be infected with the big brown bat strain of rabies.

More inside:

WNV, Idaho, 2004	2
Tularemia	2
Plague Module	3
Food Allergens	3

The bite victim is undergoing rabies post-exposure prophylaxis. This is the first rabid skunk known to have been found in Idaho in recent history. There is a previous record from 1967 of a rabid skunk with an undetermined strain of rabies.

Idaho is one of a handful of western states that does not have any record of detection of terrestrial rabies strains (skunk, fox, coyote, or raccoon) in wildlife. The bat strain is the only strain known to have been detected in Idaho. In Idaho, the bat strain has been found predominantly in bats and also has been detected in a cat in 1991, a cat in 1992, a horse in 1999, and a bobcat in 2000. Transmission of the bat strain among skunks in Flagstaff, AZ in 2001 caused an outbreak (epizootic) in that skunk population so this may not be an isolated incident in the area. People in the Gooding area should take precautions to protect themselves and vaccinate their dogs and cats in case other rabid skunks or other rabid wildlife species are roaming the area.



West Nile virus, Idaho, 2004

It took 5 years from its detection in New York City in 1999, but the mosquito-borne arbovirus, West Nile virus (WNV), finally affected Idaho widely in the fall of 2004. Surveillance efforts directed by the Idaho Department of Health and Welfare focused on detecting WNV in humans, horses, birds, and mosquitoes. Low levels of disease in southwestern and south central Idaho were reported from August to October, with a sharp drop in reported cases after killing frosts. Three people with acute WNV infections were reported, twenty-two infected horses were reported by the Idaho State Department of Agriculture, and seven WNV-positive birds (four crows, two magpies, and one golden eagle) were detected with the assistance of the seven district health departments and the Idaho Department of Fish and Game. West Nile virus was not detected in collected mosquitoes. A lack of detection in mosquitoes suggests that the infection rate in mosquitoes was low, resulting in very low levels of disease transmission this year.

If WNV in Idaho in 2005 follows the pattern seen in most other states, more human and animal cases and significant deaths in some of the wild bird populations next summer may be expected in Idaho. Two equine vaccines are available, but human vaccines are still in development; therefore, prevention messages must be emphasized in 2005. Prevention measures include avoiding mosquito bites and reducing the source of mosquitoes by reducing mosquito breeding habitats around the home and in the local community.

Testing for humans is available from a number of commercial laboratories. The Idaho Bureau of Laboratories (IBL) will continue to offer testing for neuroinvasive disease due to both West Nile virus and St. Louis encephalitis virus (SLE), a closely related arbovirus, and hopes to introduce plaque-reduction neutralization assays (PRNT) in 2005. Healthcare providers may submit samples from neuroinvasive cases for WNV and SLE testing to IBL in 2005.

More general information on WNV is available on the Idaho State Department of Health and Welfare website at www.healthandwelfare.idaho.gov/

Tularemia in Idaho

A veterinarian recently contracted tularemia (*Francisella tularensis*) from a feline patient through a cut acquired during a necropsy. The cat had died from a debilitating condition with a respiratory component, and the veterinarian was collecting diagnostic samples for microbiologic examination. Tissue samples from the cat were sent to a regional veterinary diagnostic laboratory for analysis. When *F. tularensis* was suspected in the cat samples, preliminary cultures were forwarded to the Idaho Bureau of Laboratories for further work-up. Four days after the necropsy, the veterinarian developed swelling at the site of the cut and by day seven had axillary swelling, myalgias, arthralgias, fever, headache, and nausea. The veterinarian suspected he had tularemia, relayed that to his physician, and was treated promptly. Matching isolates were recovered from both the veterinarian and the cat.

Tularemia cases appear to be rare in Idaho or underdiagnosed. Only ten cases, including this one, have been reported between 1985 and 2004. Tularemia may be acquired from handling fluids or tissues of infected animals, the bite of an infected arthropod, ingestion of contaminated meat or

water, or inhalation of contaminated dust or aerosolized particles. It is thought to be enzootic among wildlife in Idaho, and domestic animals that frequent the outdoors, especially ones that predate upon wild rodents and lagomorphs, are at risk of infection. Risk factors for infection in Idaho have included skinning a bear and receiving a fly bite.

Tularemia has several distinct forms, including the following:

- Ulceroglandular (cutaneous ulcer with regional lymphadenopathy)
- Glandular (regional lymphadenopathy with no ulcer)
- Oculoglandular (conjunctivitis with preauricular lymphadenopathy)
- Oropharyngeal (stomatitis or pharyngitis or tonsillitis and cervical lymphadenopathy)
- Intestinal (intestinal pain, vomiting, and diarrhea)
- Pneumonic (primary pleuropulmonary disease)
- Typhoidal (febrile illness without early localizing signs and symptoms)

Symptoms usually appear 3 to 5 days after exposure to the bacteria, but can take as long as 14 days to appear.

Tularemia is listed by CDC as a possible agent of bioterrorism. All reports of tularemia are investigated by public health to confirm the diagnosis and determine the source.

Plague Module

The CDC has developed a web-based, on-line training module for healthcare professionals and veterinarians to learn important information about plague. The training module, available at <http://www.bt.cdc.gov/agent/plague/trainingmodule/index.asp>, provides a series of eight lessons describing the epidemiology of plague and how to manage both naturally occurring disease and disease caused by an intentional attack. Upon completion of the module, the participant will be able to:

- Identify areas with naturally occurring plague in order to recognize possible acts of bioterrorism.
- Identify patient symptoms indicating a diagnosis of bubonic, pneumonic, or septicemic plague.
- Describe how to rule out other diseases when diagnosing plague

- Identify the appropriate specimens to obtain in order to diagnose plague.
- Describe the medical management of confirmed plague cases.
- Describe the public health response needed for naturally-occurring versus bioterrorist-associated plague.
- Describe the diagnosis of plague in animals

Continuing education credits are available. CDs or videos of this training are not available.



Improved Food Allergen Labeling

Some consumers who suffer from food allergies can experience severe anaphylactic shock if a food allergen is consumed. Public law # 108-282, the **Food Allergen Labeling and Consumer Protection Act**, was signed into law by President Bush on August 2, 2004. The Act will provide improved food labeling information to consumers. This will be critical for those who suffer from food allergies. It requires food labels to identify, in plain English, if the product contains any of the eight major food allergens listed alphabetically below:

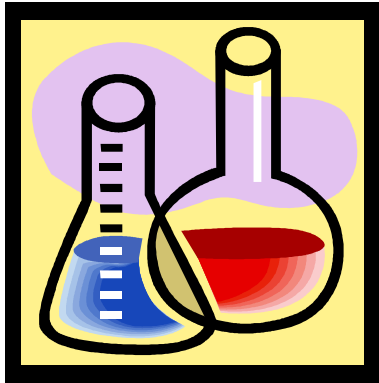
Crustacean shellfish	Peanuts
Eggs	Tree nuts
Fish	Wheat
Milk	Soybeans

The new labeling requirements should be especially helpful to children who must learn to recognize the presence of substances that should be avoided. The new labeling requirements are in place now and will be enforceable beginning in January, 2006, meaning that foods after that date will be considered mislabeled if the label doesn't declare the allergens.

Don't miss the next issue:

Chemical terrorism.

Recognizing intentional chemical exposures and procedures to manage them.



Idaho Disease Bulletin

Office of Epidemiology and Food Protection

P. O. Box 83720

450 W. State St., 4th Floor

Boise, ID 83720-0036

<http://www.idahohealth.org>

(208) 334-5939

Editors:

Christine G. Hahn, MD

State Epidemiologist

Leslie Tengelsen, PhD, DVM

Deputy State Epidemiologist

Kris Carter, DVM, MPVM

Career Epidemiology Field Officer

ROUTINE PHYSICIAN 24-HOUR DISEASE REPORTING LINE: 1-800-632-5927
EMERGENCY PHYSICIAN 24-HOUR REPORTING LINE: 1-800-632-8000

Idaho Disease

BULLETIN

Idaho Department of Health and Welfare

Division of Health

P. O. Box 83720

Boise, ID 83720-0036

PRSR STD
U.S. POSTAGE
PAID
PERMIT NO. 1
BOISE, ID